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# NOTICE OF ALLOWANCE AND FEE(S) DUE

23552 7590 09/02/2010 MERCHANT & GOULD PC

P.O. BOX 2903

MINNEAPOLIS, MN 55402-0903

EXAMINER LE, HOANGANH T PAPER NUMBER ARTHNIT

2821 DATE MAILED: 09/02/2010

APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 1704 10/582.573 02/21/2007 Patrick Walter Joseph Dijkstra 12114.0004USWO TITLE OF INVENTION: COUPLING FOR PATCH ANTENNAS

| APPLN. TYPE    | SMALL ENTITY | ISSUE FEE DUE | PUBLICATION FEE DUE | PREV. PAID ISSUE FEE | TOTAL FEE(S) DUE | DATE DUE   |
|----------------|--------------|---------------|---------------------|----------------------|------------------|------------|
| nonprovisional | NO           | \$1510        | \$300               | \$0                  | \$1810           | 12/02/2010 |

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. <u>PROSECUTION ON THE MERITS IS CLOSED.</u> THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown

B. If the status above is to be removed, check box 5b on Part B -Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

# Complete and send this form, together with applicable fee(s), to: Mail Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

| INSTRUCTIONS: This is<br>appropriate. All further c<br>indicated unless corrected<br>maintenance fee notificati  | form should be used for<br>correspondence including<br>d below or directed oth<br>ions.   | or tran<br>g the l<br>erwise        | smitting the ISSU<br>Patent, advance or<br>in Block 1, by (a  |  |  |   |  |  | hould be completed when<br>correspondence address a<br>trate "FEE ADDRESS" for   |
|--|---|-------------------------------------|---|--|--|---|--|--|--|
| CURRENT CORRESPONDED   | NCE ADDRESS (Note: Use Bi   | ock I for:                          | any change of address)  |  | Fee(:<br>pape  | <ul> <li>Transmittal. Thirs. Each additional</li> </ul>   | is certil<br>I paper                           | ficate cannot be used f  | r domestic mailings of th<br>or any other accompanyin<br>nt or formal drawing, mus   |
| 23552<br>MERCHANT &<br>P.O. BOX 2903<br>MINNEAPOLIS,   |   | /2010                               |   |  | Lber   | Cer   | tificate                                       | e of Mailing or Trans  | mission g deposited with the Unite st class mail in an envelop above, or being facsimil ate indicated below.                                 |
|  |   |                                     |   |  |  |   |  |  | (Depositor's name  |
|  |   |                                     |   |  |  |   |  |  | (Signature   |
|  |   |                                     |   |  |  |   |  |  | (Date  |
| APPLICATION NO.  | FILING DATE   |                                     |   | FIRST NAMED INVEN  | TOR  |   | ATTO   | RNEY DOCKET NO.  | CONFIRMATION NO.   |
| 10/582,573   | 02/21/2007  |                                     | Pa  | atrick Walter Joseph D   | Dijkst   | ra  | 12   | 2114.0004USWO  | 1704   |
| TITLE OF INVENTION:  |   |                                     |   |  |  |   |  |  |  |
| APPLN. TYPE  | SMALL ENTITY  | ISS                                 | SUE FEE DUE   | PUBLICATION FEE D  | UE   | PREV. PAID ISSU   | E FEE  | TOTAL FEE(S) DUE   | DATE DUE   |
| nonprovisional   | NO  |                                     | \$1510  | \$300  |  | \$0   |  | \$1810   | 12/02/2010   |
| EXAMI  | NER   |                                     | ART UNIT  | CLASS-SUBCLASS   |  |   |  |  |  |
| LE, HOAN   | GANH T  |                                     | 282I  | 343-7000MS   | _  |   |  |  |  |
| "Fee Address" indic<br>PTO/SB/47; Rev 03-02<br>Number is required.  3. ASSIGNEE NAME AN  | ondence address (or Cha<br>/122) attached.<br>cation (or "Fee Address<br>2 or more recent) attach<br>ND RESIDENCE DATA<br>sess an assignee is ident<br>in 37 CFR 3.11. Comp | nge of 6 ' Indica ed. Use           | Correspondence  ution form of a Customer  E PRINTED ON 1  |  | ip to<br>native<br>single<br>or a<br>attor<br>il be p<br>or typ<br>he pa | 3 registered paten<br>ely, firm (having as a<br>gent) and the nam<br>neys or agents. If<br>orinted.  e) tent. If an assign<br>assignment. | memb<br>es of u<br>no nan                      | per a 2p to ne is 3  | ocument has been filed fo  |
| Please check the appropris   | ate assignee category or  | catego                              | ries (will not be pr  | inted on the patent):  | ۵  | Individual 🚨 Co   | orporati                                       | ion or other private gro   | oup entity Governmen   |
| 4a. The following fee(s) are submitted:    Itsue Fee   Publication Fee (No small entity discount permitted)   Advance Order - # of Copies                                    |   |                                     | ed)   | th. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)  A check is enclosed. Payment by credit card. Form PTO-2038 is attached.  The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Depoid Account Number (enclose an extra copy of this form). |  |   |  |  |  |
|  | SMALL ENTITY state  | s. See 3                            | 37 CFR 1.27.  |  |  |   |  | TITY status. See 37 Cl   |  |
| NOTE: The Issue Fee and<br>interest as shown by the re   | Publication Fee (if requeends of the United Sta   | iired) v<br>tes Pate                | vill not be accepted<br>ent and Trademark   | d from anyone other the<br>Office.   | nan ti   | ie applicant; a regi  | stered   | attorney or agent; or th   | ne assignee or other party i   |
| Authorized Signature _   |   |                                     |   |  |  | Date  |  |  |  |
| Typed or printed name  |   |                                     |   | Registration No.   |  |   |  |  |  |
| This collection of informa<br>an application. Confidenti<br>submitting the completed<br>this form and/or suggestio<br>Box 1450, Alexandria, Vir<br>Alexandria, Virginia 2231 | tion is required by 37 C<br>iality is governed by 35<br>application form to the<br>ons for reducing this bur<br>reginia 22313-1450. DC<br>3-1450.                           | FR 1.3<br>U.S.C.<br>USPT<br>den, sh | 11. The informatic<br>122 and 37 CFR<br>O. Time will vary<br>lould be sent to the<br>SEND FEES OR O | on is required to obtain<br>1.14. This collection i<br>depending upon the i<br>e Chief Information O<br>COMPLETED FORM   | or re<br>s esti<br>indivi<br>iffice<br>S TC                              | etain a benefit by t<br>mated to take 12 i<br>dual case. Any co<br>r, U.S. Patent and<br>THIS ADDRESS                                     | he pub<br>minuter<br>mment<br>Trader<br>S. SEN | lic which is to file (and<br>s to complete, includin<br>ts on the amount of tir<br>nark Office, U.S. Dep<br>D TO: Commissioner | by the USPTO to process<br>g gathering, preparing, an<br>me you require to complet<br>artment of Commerce, P.C<br>for Patents, P.O. Box 1450 |

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DATE MAILED: 09/02/2010

| APPLICATION NO.                             | FILING DATE    | FIRST NAMED INVENTOR           | ATTORNEY DOCKET NO. | CONFIRMATION NO. |  |
|---|----------------|--------------------------------|---------------------|------------------|--|
| 10/582,573 02/21/2007                       |                | Patrick Walter Joseph Dijkstra | 12114.0004USWO      | 1704             |  |
| 23552 7.                                    | 590 09/02/2010 |                                | EXAMINER            |                  |  |
| MERCHANT & GOULD PC                         |                |                                | LE, HOANGANH T      |                  |  |
| P.O. BOX 2903<br>MINNEAPOLIS, MN 55402-0903 |                |                                | ART UNIT PAPER NUMB |                  |  |
|   |                |                                | 2821                |                  |  |

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 404 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 404 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

| Notice of Allowability    Application No.   Application No.   Application No.   JUSEPH   Art Unit   JUSEPH   Art Unit   JUSEPH   Art Unit   Art |   |   |                                 |        |  |  |  |  |
|--|---|---|---------------------------------|--------|--|--|--|--|
| Notice of Allowability    Examiner   |   | Application No.   | Applicant(s)                    |        |  |  |  |  |
| Reaminer   Art Unit   2821   | Notice of Allowability  | 10/582,573  |                                 |        |  |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address—All claims being allowable. PROSECUTION ON THE MERTS IS (OR REMAINS) CLOSED in this application, if not included herewith for previously maliely, a Notice of Allowance (PTOL-85) or other appropriate communication will be malied in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.  1. ☑ This communication is responsive to RCE received on August 02, 2010.  2. ☑ The allowed claim(s) is/are 1-1 and 6-16.  3. ☑ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) ☑ All i b) ☐ Some* of ☐ None of the:  1. ☑ Certified copies of the priority documents have been received.  2. ☐ Certified copies of the priority documents have been received in Application No  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule IT.2(a)).  **Certified copies not received:  Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDOMMENT of this application.  THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.  4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.  5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.  (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached  1) ☐ herefor or 2) ☐ to Paper No./Mail Date  (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date  (c) ☐ DEPOSIT OF and/or (                                   | nouse of renovability   | Examiner  | Art Unit                        |        |  |  |  |  |
| All claims being allowable, PROSECUTION ON THE MERTIS IS (OR REMAINS) CLOSED in this application, if not included herewith (or previously malied), a Notice of Allowance (PTOL-85) or other appropriate communication will be malied in due course. THIS NOTICE OF ALLOWABILITY IS NOTI A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR. 1313 and MPEP 1304.  1.  |   | HoangAnh T. Le  | 2821                            |        |  |  |  |  |
| 2  | All claims being allowable, PROSECUTION ON THE MERITS S (OR REMAINS) CLOSED in this application. If not included<br>herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS<br>NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative<br>of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.  |   |                                 |        |  |  |  |  |
| 3.   | <ol> <li>         ∴ This communication is responsive to <u>RCE received on August 02, 2010</u>.     </li> </ol>   |   |                                 |        |  |  |  |  |
| a) All b) some* c) None of the:  1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No  | <ol> <li>   ∑ The allowed claim(s) is/are 1-4 and 6-16.  </li> </ol>  |   |                                 |        |  |  |  |  |
| 1. ☑ Notice of References Cited (PTO-892) 2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) 3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date   | 3. ☑ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☑ All b) ☐ Some* c) ☐ None of the:  1. ☑ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).  **Certified copies not received:  Applicant has THREE MONTH'S FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**  4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTC-152) which gives reason(s) why the oath or declaration is deficient.  5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.  (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached  1) ☐ hereto or 20 ☐ to Paper No./Mail Date  (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date  Identifying indicia such as the application number (see 37 CFR 1.34(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).  6. ☐ DEPOSIT OF and/or NIPFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the |   |                                 |        |  |  |  |  |
|  | Notice of References Cited (PTO-892)     Notice of Draftpersons Patent Drawing Review (PTO-948)     Paper No.Mail Date  | 6. ☐ Interview Summary<br>Paper No./Mail Dat<br>7. ☐ Examiner's Amendn<br>8. ☑ Examiner's Stateme | (PTO-413),<br>e<br>nent/Comment | owance |  |  |  |  |

Application/Control Number: 10/582,573 Page 2

Art Unit: 2821

### DETAILED ACTION

1. Claims 1-4, and 6-16 are allowed.

2. The following is an examiner's statement of reasons for allowance: none of the cited art discloses that the coupling means comprise a metal passage through a hole in the antenna plate which transposes printed circuit board, the hole defining a wall and the passage being in direct contact with the wall of the hole and transposing into a bond pad in direct contact with and against the second side of the antenna plate on the second side printed circuit board, and a metal bond wire between the electronic component and the bond pad, wherein the length of the passage, as seen perpendicularly of the antenna plate printed circuit board, is many times smaller than a quarter-wavelength of the signal to be processed by the antenna.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

 Any inquiry concerning this communication or earlier communications from the examiner should be directed to HoangAnh T. Le whose telephone number is (571) 272-1823. The examiner can normally be reached on 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas Owens can be reached on (571) 272-1662. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/582,573 Page 3

Art Unit: 2821

4. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/HoangAnh T Le/ Primary Examiner, Art Unit 2821